

EDITOR'S PAGE

A Call to Arms. . .Legs, Brains, and Kidneys!

Editor's Note: In order to strengthen the Journal's commitment to vascular disease outside the heart, I am pleased to announce that Chris White has joined the journal as an associate editor. The following reflects his clinical wisdom and editorial expertise.

—Spencer B. King III, MD

No interventional cardiologist would argue with the primacy of “atherosclerosis” as the dominant cardiovascular disease threatening our patients. Interventional cardiologists have established a reputation of providing expert, evidence-based patient care; recommending appropriate life-style modification, antilipid therapy, and antithrombotic therapy; and the remarkable ability, on a national scale, to mobilize around-the-clock on-demand treatment for acute myocardial infarctions. So what is wrong with this picture?

The fact is, atherosclerotic vascular disease is not limited to the heart and coronary arteries, and atherosclerosis does not fit neatly into the “departmental silos” of academia. Besides the heart, atherosclerosis commonly affects several clinically important vascular territories including the brain, the viscera, the kidneys, and the limbs. Why would well-meaning, highly-trained, and very talented interventional cardiologists fail to embrace the opportunity and accept the responsibility to treat cardiovascular disease in all of its manifestations? In the past, cardiologists have been guilty of tunnel-vision, of narrowly focusing their attention on the heart, while other vascular beds were left to the care of a variety of subspecialists. In addition, in many hospitals, “turf wars” have resulted in barriers preventing cardiologists from treating vascular territories beyond the heart.

In an effort to broaden cardiovascular fellowship training, the Core Cardiology Training Symposium (COCATS) document was revised in 2002 to include Task Force 11, which specifically prescribes training in vascular medicine and peripheral vascular catheter-based interventions (1). To facilitate engagement of post-graduate (practicing) cardiologists, in 2004 the American College of Cardiology (ACC) organized a consensus document, endorsed by multiple vascular-related specialties, to outline a pathway to clinical competence in vascular medicine and peripheral vascular interventions (2). Finally, the American Board of Vascular Medicine was formed with sponsorship from the ACC, the Society of Vascular Medicine, and the Society of Cardiovascular Angiography and Interventions and held its first certifying examination for cardiovascular specialists in both vascular medicine and endovascular medicine in 2005 (3).

That there is a great unmet need for catheter-based treatment of patients with noncoronary vascular disease is not in doubt. From cerebrovascular disease to limb salvage there are patients, very often “our” patients, that are in need of a cardiovascular specialist who can provide both medical and interventional care. One of the largest discrepancies in health care delivery is the difference between the care given to a patient with a heart attack and his twin brother suffering a stroke, both brought to a hospital at 2:00 AM.

The heart attack patient is immediately triaged to acute care and has an electrocardiogram performed within 5 min revealing ST-segment elevation, which results in immediate mobilization of the catheterization laboratory team to achieve a “door to balloon time” of <90 min. This is a national quality standard uniformly endorsed by professional societies and accrediting agencies.

The brother with the stroke arrives at the same hospital. Because he had been asleep for 4 h before he awoke with his stroke, he is beyond the 3-h time limit to receive intravenous thrombolysis, and because he lives in 1 of the 5 states that do not have a neuroradiologist, there is



Christopher J. White, MD

Associate Editor,
*JACC: Cardiovascular
Interventions*

... atherosclerotic vascular disease is not limited to the heart and coronary arteries, and atherosclerosis does not fit neatly into the “departmental silos” of academia. Besides the heart, atherosclerosis commonly affects several clinically important vascular territories including the brain, the viscera, the kidneys, and the limbs.

not a physician who can provide invasive reperfusion therapy for his stroke. He is managed, and I use that term loosely, without any attempt at revascularization. Unfortunately, there is no national quality standard for acute stroke reperfusion therapy, and there is little hope for improvement on the horizon.

The lack of interventional reperfusion options for acute stroke is a national embarrassment. Everyone seems to be on-board with early reperfusion therapy for acute heart attacks, while stroke, the largest single cause of adult disability, languishes in the "can't do" category. Despite guidelines for comprehensive stroke centers, few are functional because there are not enough physicians to provide 24/7 on-demand physician coverage. It is estimated that fewer than 2% of all stroke patients in this country actually receive intravenous thrombolysis, while a total of 385 interventional neuroradiologists practicing in 238 hospitals covering 45 states are available to provide national, around-the-clock stroke coverage (4). This is the "elephant in the room" when quality metrics such as door-to-treatment time for stroke therapy are discussed. Everyone knows additional manpower is needed to provide on-demand reperfusion therapy for stroke, but turf battles make it difficult for interventional cardiologists, particularly those with carotid stent skills, to lend a hand.

Likewise, hypertension and renal failure are both major contributors to morbidity and mortality in cardiovascular patients. Renal artery stenosis, a cause of both, is more prevalent (15% to 20%) in our cardiovascular atherosclerotic population than previously thought. We can move this field forward by disseminating knowledge of the appropriate screening strategies and by practicing evidence-based medicine when selecting patients for catheter-based treatment. Both are keys to a successful renovascular strategy for interventional cardiologists.

Finally, lower limb ischemia (typical and atypical claudication), which limits physical activity, restricts mobility, and compromises fitness, is present in a sizeable number of our coronary artery disease patients. Physical activity, a well-accepted surrogate for survival, means that physicians have a strong incentive to enable their patients to walk and to be physically active. Catheter-based revascularization, in addition to pharmacologic and exercise therapies,

are critical elements in any effective lower limb ischemia treatment strategy.

Why should an interventional cardiologist participate in "total body" catheter-based vascular care? First, it is well recognized that atherosclerosis is a systemic disease, not limited to the coronary circulation. If our patients have coronary disease, inevitably there are other vascular territories that are affected. Second, interventional cardiologists are arguably the most skilled providers of catheter-based therapies, the dominant therapies for atherosclerotic vascular diseases. Third, interventional cardiologists provide a continuum of care from the outpatient clinic to the interventional suite, including long-term follow up, perhaps the single most important element when caring for patients with a chronic disease.

In an effort to assist and support interventional cardiologists' efforts to improve their fund of knowledge relevant to noncoronary vascular diseases, *JACC: Cardiovascular Interventions* offers a forum to exchange ideas, to introduce novel clinical approaches and device-based strategies, and above all, to improve patient outcomes.

Address correspondence to:

Christopher J. White, MD
Department of Cardiology
Ochsner Clinic Foundation
1514 Jefferson Highway
New Orleans, Louisiana 70121-2429
cwhite@ochsner.org

REFERENCES

1. Beller GA, Bonow RO, Fuster V. ACC revised recommendations for training in adult cardiovascular medicine. Core Cardiology Training II (COCATS 2). (Revision of the 1995 COCATS training statement). *J Am Coll Cardiol* 2002;39:1242-6.
2. Creager MA, Goldstone J, Hirshfeld JW, et al. ACC/ACP/SCAI/SVMB/SVS clinical competence statement on vascular medicine and catheter-based peripheral vascular interventions: a report of the American College of Cardiology/American Heart Association/American College of Physician Task Force on Clinical Competence (ACC/ACP/SCAI/SVMB/SVS Writing Committee to Develop a Clinical Competence Statement on Peripheral Vascular Disease). *J Am Coll Cardiol* 2004;44:941-57.
3. American Board of Vascular Medicine. Available at: <http://www.vascularboard.org/index.cfm>. Accessed February 22, 2009.
4. Suzuki S, Saverd JL, Scotte P, et al. Access to intra-arterial therapies for acute ischemic stroke: an analysis of the US population. *AJNR Am J Neuroradiol* 2004;25:1802-6.